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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,211	03/22/2004	Chang-Chieh Sung		3304

25859 7590 11/08/2005
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EXAMINER

CRANSON JR, JAMES W

ART UNIT PAPER NUMBER

2875

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,211

Applicant(s)

SUNG, CHANG-CHIEH

Examiner

James W. Cranson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14, 15 and 19 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 5, 7, 11-13, 16 and 20 is/are rejected.
- 7) ☒ Claim(s) 3, 6, 8-10, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/22/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 4, 5, 7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,644,824 B2 to Baba..

Regarding claim 1:

A surface lighting device(1) for a display device, comprising:
a light guide plate(7) having a light incident surface (4);
light reflector(3) substantially juxtaposed with light guide,
light reflector(3)having a reflecting portion (9)

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obliquely opposite to light incident surface;
and a point light source(2) for emitting light beams, the point light source located between one end of the light reflector and the light incident surface; wherein the light reflector receives the light beams emitted from the point light source, and reflects the light beams into the light incident surface of the light guide plate.

US 6,644,824 B2 to Baba. does not have the light reflector obliquely opposite to the light incident surface. It would have been obvious to one of ordinary skill in the art at the time of invention to provide US 6,644,824 B2 to Baba with light reflector obliquely opposite to the light incident surface because changing the light reflector from parallel to light incident surface to oblique to light incident surface forces more light to be reflected into the incident surface.

Regarding claim 4, according to claim 1:

Baba discloses and illustrates in figure 4 the reflecting portion (9) is a sidewall of light reflector and has top and bottom planar walls adjoining sidewall.

Regarding claim 5, according to claim 1:

Baba discloses and illustrates the claimed invention except for the light reflector having an arch-shaped cross section. It would have been obvious to one of ordinary skill in the art at the time of invention to provide US 6,644,824 B2 to Baba with an arch-shaped cross section because it has been held that lacking any critically, changing the form or shape of prior art parts does not make the claimed invention patentable over that prior art (*In re Dailey*, 149 USPQ 47).

Regarding claim 7, according to claim 1:

Baba discloses and illustrates the claimed invention except for the light reflector being generally L- shaped. It would have been obvious to one of ordinary skill in the art at the time of invention to provide US 6,644,824 B2 to Baba with an L- shaped reflector because it has been held that lacking any critically, changing the form or shape of prior art parts does not make the claimed invention patentable over that prior art (*In re Dailey*, 149 USPQ 47).

Regarding claims 11-13, according to claims 1 and 11:

Baba discloses and illustrates in figure 13 two light reflectors, two corresponding point light sources, arranged symmetrically opposite each other with light sources diagonally opposite.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,644,824 B2 to Baba in view of US 6,685,328 to Hanson et al.

Baba does not have brightness enhancement film sandwiched between the light incident surface and the light reflector.

Hanson in a display having planar light guide and integrally formed frame having brightness enhancement film sandwiched between the light incident surface and the light reflector in figure 5C “brightness enhancement film (BEF) 580 is disposed between light bar 530 and planar light guide 120”. It would have been obvious to one of ordinary skill in the art at the time of invention to provide US 6,644,824 B2 to Baba with a brightness enhancement film sandwiched between the light incident surface and the light reflector as taught by Hanson. The reason is to have more light enter the emission surface.

The following claims have been rejected in light of the specification, but rendered the broadest interpretation [MPEP 2111]. Applicant should positively cite the structural limitations to be given full patentable weight within an apparatus claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by US
6,685,328 to Hanson

Regarding claim 16:

A surface lighting device for a display device
(figures 5A,B) comprising: a light guide plate (520)
having a light incident surface figure 5A,B unlabeled;
and a light reflector (530) coupled with the
light guide plate and having a sidewall opposite (560) to light
incident surface; wherein, one end of the sidewall(565)
connects with the light incident surface, and
a point light source (510) is provided between an opposite end
of the light reflector and the light incident surface.

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Regarding claim 20, according to claim 16:

Hanson discloses and illustrates that point light sources are directed toward end connecting side wall and light incident face.

Allowable Subject Matter

Claims 3,6,8-10, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 3, according to claim 1 adds that a light emitting surface of the point light source is located inside the light reflector.

Claim 6, according to claim 1 adds that reflecting portion comprises a plurality of prisms formed on an inside of the light reflector.

Claim 8, according to claim 1, adds that an opposite end of the light reflector connects with the light incident surface.

Claim 9, according to claim 8, adds that said opposite end is arcuate.

Claim 10, according to claim 8, adds that light reflector is arcuate.

Claim 17, according to claim 16, adds that point light source is positioned on a mount portion.

Claim 18, according to claim 17, adds that the mount portion, light guide plate and light reflector connect to form a closed space.

The limitations in the claims objected to as being dependent upon a rejected base claim, but that would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims are not found or taught in the art of record.

Claims 14, 15 and 19 are allowed.

The following is an examiner's statement of reasons for allowance: Claim 14 includes A surface lighting device for a display device, comprising: a light guide plate having light incident surface, mount portion for fixing a point, light source and light reflector coupled with light incident surface of guide plate, light guide plate, mount portion, and light reflector cooperate together to define a closed space therebetween, space being adapted to receive light beams emitted from point light source and to reflect received light into light incident surface of light guide plate uniformly.

The combination of limitations in claim 14 are not found or Taught in the art of record.

Claims 15 and 19 depend from claim 14, add further limitations and are allowable for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

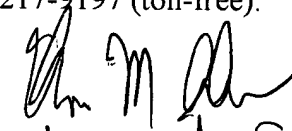
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are US 2004/0100789 A1 to Ju, US 2003/0184992 A1 to Miyazaki, US 6,685,330 B2 to Miyazaki and US 6,293,683 B1 to Okada.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Cranson whose telephone number is 571-272-2368. The examiner can normally be reached on Mon-Fri 8:30A.M. - 5:00P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).





Thomas M. Seab
Primary Examiner